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WESTERN ARMORY.

Extracts from the Report of the Commissioners appointed to select a location for the Western Armory.

Our readers will recollect that in November, 1841, the commissioners appointed by the president of the United States to select a suitable location for the contemplated Western Armory, visited this section and spent several days in making examinations. Up to this time we have been unable to procure a copy of their report, and we are now indebted to the politeness of Mr. Swift of this place, for the privilege of examining it. We extract such portions as are likely to interest the mass of our readers. By the following it will be seen that La Salle county contains at least two locations worthy the favorable notice and consideration of the commissioners:

SITE AT PERU, ON THE ILLINOIS RIVER.

The water power contemplated in this vicinity is that afforded by the Illinois and Michigan canal, which has its southern termination at La Salle, immediately above Peru.

The entire length of this canal, from Peru to Chicago, is ninety-six miles. Its summit level, which extends from Chicago to Lockport, —— miles, is supplied with water from Lake Michigan.

The lockage water from the summit level in operating machinery at Lockport, together with the low-water tribute afforded the Des Plains river, are relied on for the supply of the canal between Lockport and Marseilles, at which commences a lower reach of level, supplied mainly by Fox river. From this level the canal passes downwards by four locks and three successive levels, all depending for their supply of water mainly upon the lockage water derived from the Fox river level. At Ottawa, in the vicinity of the level last mentioned, it is the purpose of the state to withdraw from the canal (viz: from the Fox river level) all the water that can be spared, for the purpose of operating machinery at this point; consequently, there will remain but very little water for the supply of the lower levels, except what may be drawn from the Fox river levels as lockage water, all of which will be required for the supply of the locks below. Hence we may infer that any dependence upon a water power for any considerable mechanical operations, to be derived from the canal at Peru, is altogether fallacious.

Moreover, the range from extreme low to extreme high water, at Peru, is variously estimated; some say that it is twenty, others twenty-four, and others again at twenty-six feet. We were credibly informed, by one of the canal engineers who had paid particular attention to the subject, that its ordinary range might be stated at twenty feet; and that an extreme range, especially when the river below happened to be gorged with ice, which is not unfrequntly the case, is twenty-four to twenty-six feet. In either of these events, the water power at the levels above the first and second locks, both of which are situated at the southerly termination of the canal, will be nearly or quite neutralized during the continuance of extreme high water.

The board, being satisfied that a water power adapted to the purposes of an armory could not be derived from the canal, directed their inquiries to a natural waterfall a few miles above Peru, called the Vermilion rapids, and obtained the following information concerning the same:

Mr. Woodworth, late an engineer in the service of the state, kindly furnished the following results from surveys executed under his special direction.

Length of Vermilion rapids, 5 miles.

Aggregate fall in this distance, 7½ feet.

Extreme range at foot of rapids, 20 feet.

Extreme range at head af rapids, 13 feet.

Hence the water power at the Vermilion rpids, during extreme high water, will be entirely neutralized.

Again: agreeably to intelligence received from the same gentleman, the aggregate fall from Ottawa, to Peru (the distance by land being sixteen and by water between eighteen and twenty miles) is only nineteen feet. Of course the efficient water power of the river, throughout that entire distance, will be completely neutralized during extreme high water.

In reference to the canal above mentioned, it may be further observed, that its transverse dimensions are as follows, viz:

Width at surface water, 60 feet.

Width at bottom, 40 feet.

Depth of water, 6 feet.

Estimate cost of entire canal, ninety-six miles, about eight millions of dollars; already expended, between three and four millions; required to complete the canal, between four and five millions.

Having been thus fully convinced that the requisit uninterupted water power could not be obtained, either at Peru or any other point between that place and Ottawa, the board proceeded to Ottawa for the purpose of examining a site at which a water power derived from Fox river might be available.

SITE AT OTTAWA, ON THE ILLINOIS RIVER.

The water power at this place must be derived almost exclusively from Fox river, which enters the Illinois immediately above the town of Ottawa.

The Fox river level, which has an extent of about ten miles, reaches from a point about three miles below Ottawa to Marseilles which is about seven miles above, by the line of the canal.

This level must also be supplied by water from the Fox river, which is to be conveyed through a feeder about five miles long, commencing at the head of the lower rapids of Fox river, and terminating in the ten-mile reach before mentioned, opposite the town of Ottawa.

The transverse section of feeder is as follows:

Width of water surface, 22 feet.

Width of bottom, 10 feet.

Depth of water in feeder, 4 feet.

Minimum quantity of water discharged from Fox river, said to have been determined by admeasurement, thirty-seven thousand three hundred cubic feet per minute. Of this quantity, one-fourth is owned by Messrs. Green & Stadden, who have mills now in operation at the head of the feeder; another equal quantity (viz: one-fourth) in the right of the state, and is to be applied not only for the supply of the Fox river level, but for operating machinery on a large scale at the town of Ottawa; the remaining two-fourths of the water of Fox river belong to a company in New York, who are possessed of the land on the east side of the river, adjacent to the rapids.

Messrs. Green & Stadden offer their privilege, together with all their improvements in mills, &c. and 160 acres of land, including the dam, feeder, &c., for $150,000.

The quantity of water required in the Fox river level, on account of leakage, absorption, and evaporation, will amount to at least 1,000 cubic feet per minute.

The quantity owned by the state, being one-fourth of the river, will amount, in the dryest season, to 9,325 cubic feet per minute.

The aggregate descent from the surface of the Fox river level to the low-water surface of the Illinois, at Ottawa, is 37 feet.

Range from extreme high to extreme low water, at Ottawa, is 13 feet.

Aggrigate descent in extreme hegh water from surface of canal to face of river, 24 feet.

The quantity of water (with this fall of 24 feet) required to furnish a power equivalent to that of 175 horses, is 5,860⅔ cubic feet per minute.

Hence a power equivalent to that of 175 horses being required for the purpose of an armory, and this power being furnished by water from the Fox river feeder, there will remain for operating machinery at Ottawa 3,458⅓ cubic feet per minute.

By extinguishing the claim of the New York company, or even that of Messrs. Green & Stadden, to their portion to the water privileges, that of the former being attainable at a fair price, the amount of water power at this site will be amply sufficient for all the purposes under consideration.

The site here contemplated commences about a mile below the town of Ottawa, and extends downward a mile or more on the Illinois river, embracing the entire area situated between the Illinois and Michigan canal and the Illinois river. The extent of the area and other particulars respecting the site are expected in a communication and drawings from E. B. Talcot, Esq., civil engineer in the state service of Illinois, agreeably to overtures kindly made by that gentleman to the board.

The site occupies a portion of a beautiful plane, of a slightly waving aspect, extending from the mouth of Fox river downwards several miles. It is elevated considerably above the reach of the highest freshets, is considered compartitively healthy, and possesses a productive soil.

Beneath its surface, at various inconsiderable depths, are beds of limestone in horizontal strata, accompanied in many places by bituminous coal and carboniferous slate, resting upon the lime stone.

SITE AT MARSEILLES, ON THE ILLINOIS RIVER.

This locality is situated at or near the foot of the Grand rapids of the Illinois river, about seven miles above the mouth of Fox river.

Length of Grand rapids, about 900 yards.

Natural fall of rapids, in low water, 10 feet.

Dam at head of rapids, (head of water,) 5.6 feet.

The dam, together with a large flour-mill, three stories high, with six run of stones, also a saw mill connected with the same, are the property of an association of gentlemen called the Marseilles Manufacturing Company.

The agent of the company offers to sell their water privilege, which embraces the entire water power of the Illinois at these rapids, for the sum of $125,000, together with such additional compensation as may be awarded by suitable referees for the mills now erected thereat, which are to be valued at a rate not exceeding their actual worth or cost, independently of the water power; or he is willing to sell a portion of the water power and privilege, reserving for the company only a sufficiency of the water to operate the mills now erected, for the sum of $100,000.

He moreover offers 130 acre of land, within three quarters of a mile below the mill, and situated between the canal and the river, for $25 per acre. It is believed that other tracts, sufficient to cover the entire area required for an armory, can be obtained on fair terms in the vicinity of the tracts before mentioned.

The low-water supply of the Illinois at these rapids is probably about double that afforded by Fox river. The charter of the Marseilles Manufacturing Company secure them the privilege of erecting a dam seven feet high at the head of the rapids, instead of five feet and a half, its present height. Hence, the aggregate head and fall in low water will amount to seventeen feet.

A dam of the height just mentioned will back the water of the river nearly or quite to the mouth of the Kankakee, a distance of fifteen or twenty miles.

Extreme range at foot of rapids, about 13 feet.

Hence the pitch at the dam in extreme high water will be 4 feet.

Elevation of Fox river level (which commences at Marseilles) above the low water surface of the Illinois, at the foot of the Grand rapids, 19.58 feet.

Elevation of Fox river level above the crest of a dam seven feet high, at the head of the Grand rapids, 2.58 feet.

Aggregate natural fall of Illinois river, from head of Grand rapids to Ottawa, 27.42 feet.

The site most appropriate for an armory at this place is a portion of an undulatory plain, situated below the village of Marseilles, and between the canal and Illinois river. An area of about 320 acres may probably be obtained at a rate not exceeding that before mentioned, viz: $25 per acre.

This area may be enlarged at pleasure by procuring an equal or greater number of acres of land on the south side of the river, directly opposite to the former, at a price per acre considerably less than that before mentioned.

These two portions of ground, as above contemplated, may readily be connected by a bridge across the river, at or near the foot of the rapids, about 400 yards long.

The water may be conveyed from the dam, at the head of the rapids, in a race leading downward on the north side of the river, about three-fourths of a mile, supplying a range of factories or workshops situated at and below the foot of the rapids, and between the race and the margin of the river.

The site on the north side of the river is underlaid with calcareous sandstone, in a horizontal strata, which is every where found a few feet below the surface of the ground.

The ground on both sides of the river is elevated considerably obove the reach of the highest freshets. On the south bank in particular, a beautiful plain presents itself, upon which all the necessay buildings could be displayed to great advantage, and with every prospect of health.

Limestone of an excellent quality, and in abundance, is to be found in numerous locations in this section of the country.

The masonry of the Illinois and Michigan canal has been constructed of stone of this sort, and exhibits an appearance highly recommendatory, not only of the material, but also of the workmanship. The limestone contains a considerable portion of silex, but slakes well after calcination, and, with nearly equal proportions of sand and hydrate of lime, form a good mortar.

Hydarulic lime has been found in abundance. The sandstone of this part of the country is generally friable and unfit for masonry. Sandstone of a reddish complexion (ferruginous sandstone) has been found on the south side of the river, opposite Peru, which is said to be well adapted to the purpose of building. Brick clay of a good quality is abundant.

The bottom lands of the valley of the Illinois river, and of the Vermilion, Fox, and other streams in this vicinity, are generally underlaid with sandstone, in a horizontal strata, at a depth varying from one to twelve feet below the surface.

The uplands contain beds of compact clay, and occasionally stone, at a depth of a few feet below the surface. Fire clay of a good quality is said to be abundant. Bur, red, white, and post oak, white ash, black walnut, sugar tree, maple, black locust, white walnut and hickory, are the principal growth of the country. Of these several varieties of the oak, the sugar tree, maple, black and white walnut, are sawed into lumber, and sold at the rate of about $20 per thousand, board measure.

The pine timber used in this country is brought from a great distance, and costs about $30 per thousand.

Stone coal of a good quality has been discovered in various localties in almost every part of the country drained by the Illinois, from the mouth of the Kankakee downward to the Mississippi river. It is found in beds or veins, varying in thickness from one to five, and occasionlly to eight feet.

The strata that have been laid open are generally situated above the water table of the plincipal streams in the vicinity. Their depth below the upland surface varies from fifty to one hundred and fifty feet.

These veins are generally surmounted by bituminous shale and carboniferous limestone. In several instances, however, within the valleys of the streams, they have been found near the surface of the ground covered by a stratum of soil only.

The coal generally contains more or less sulphur, which prevails in many instances to an injurious extent.

From a cursory view of the country between Rock island and Peru, it appears that the proportion of prairie to woodland is about seven to one, not more than one-eighth of the entire surface being covered with a growth of timber.

The soil appears remarkably rich, and in situations where it has been cultivated, gives evidence of exceeding fertility.

The navigation of the Illinois river is generally suspended by ice for a period of three months in the year, viz: from the first of December to the first of March. During a dry season it has a low-water depth of about two feet on the bars, and of course is then navigable only for boats of the lightest draught.

As this river however is a sluggish stream from Peru to its mouth, (its bed having only the minimum declivity requisite to the production of a current,) the obstacles last mentioned will no doubt in some degree be remedied, upon the completion of the canal, by the introduction of a copious supply of water from Lake Michigan.

The bed of the Illinois river, from Peru to its mouth on the Mississippi, is remarkably straight; and in its broad and deep valley, evidences are every where presented, authorising the conclusion that Lake Michigan and other lakes above the falls of Niagara once discharged their waters in this direction towards the Gulf of Mexico.

GENERAL REMARKS.

Of the several sites examined on the Illinois river, that at Ottawa, near the mouth of Fox river, and another at Marseilles, eleven miles above, are the only two that deserve to be mentioned in this place. At both of those points, water power sufficient for all the purposes of an armory can be obtained. The last of these two positions, however, is decidedly to be preferred, and for the reason that the power is taken from the river itself, with the entire control of both shores to any desirable extent, while the power at Ottawa is to be derived from the canal, with all the inconvenience of an entangling alliance with a state institution or canal company, including, probably, nay certain, suspensions of work by the breaking of dams, the annual drawing off of water to clear out the canal, &c.

The same objections, on account of interrupted navigation and suspended navigation, by low-water in the summer, and by ice in the winter season, may be advanced, and, it is believed, with stronger reason against these two positions than against those on the upper Mississippi. Again, these points are within eighty-five miles of Lake Michigan, with a plain country, very sparsely populated between; the amount of poulation immediately around, and on the shores of the Illinois below, being also very inconsiderable. A large manufactory and store-house of arms thus exposed might, in the event of hostilities, invite an attack from Canada; and it might not be altogether secure from destruction by a combined force of British and Indians, organized in advance, and immediately put forth on the declaration of war. It would, at any rate, be considered by ourselves a probable point of attack; and military propriety would require that we should keep a large military force in position, to defend the armory and prevent this section of country from becoming the theatre of war.

From the New Orleans Picayune.

The Way to Make a Teetotaler.

Evaporation, its power—or, the ingenuity of tippling Rats.

Mr. C., commission merchant of this city, is known as an extensive holder of Western produce, and his stock is not more noted for its variety, than for the superiority of the several articles which he keeps on hand. His per centage on the sale of Monongahela whiskey through the year would, by a man of moderate notions, be reckoned a liberal income. Customers came so quick to purchase, that, to save the trouble of too frequent a recurrence to the barrel, he has been in the habit of keeping a sample bottle in the store, always full, or partially so, for their trial and inspection. He had found for a long time that the contents of the sample bottle decreased very rapidly, daily, and in a manner, at first, very mysteriously. He soon learned, hawever, that "Sampson, the negro who stayed in the store, was any thing but a Washingtonian, and that he tried the strength of the Monongahela oftener than the whole of his customers. Desirous to know if his conscientiousness were as large as his alimentiveness, he said to him on Monday night, "Sampson, how is it that the whiskey in the sample bottle diminishes so fast? Why it has to be filled daily!"

'Clar go, massa, I does'nt know,' said Sampson, looking as serious as a converted sinner at a camp-meeting, 'but I thinks, massa, it is carried off by de prinserples ob wot white folks calls 'waporation.'

'O, you do, Sampson!' said Mr. C.

'I does, sartin, massa, said Sampson, 'cause I tells you dat ere 'waporation's right strong; gosh, it aint left a drop o' hard cider in de country. I tink it's dat wot makes de whiskey so scarce, and not de temperance movement, as dey calls it.'

'Well, then, Sampson,' said Mr. C., 'fill the bottle now, and I will cork it so tight as to prevent evaporation.'

'Es, sa,' said Sampson.'

He filled the bottle, his master corked it evaporation tight, and again it was placed on the shelf. Again on Tuesday morning it was found to have decreased considerably in quantity, and still more towards noon.

'Well, Sampson,' said Mr. C., 'I find the whiskey is still rapidly decreasing. How do you account for it now?'

'Wa-well, it be berry hard to 'splain, massa,' said Sampson, 'it be one ob dose 'sterious disappearances wot niggers can't 'cout for, and wat sometimes puzzles white folks, I tell you.'

'But what is your opinion?' said Mr. C.

'Wal-al, I tinks,' said Sampson, 'to tell goramighty's truf, dat de rats be drinkin' it, for dey has'nt joined de temp-rance 'siety as I knows on.'

'Yes,' said Mr. C., but when it would get down as low as the centre of the bottle, how would the rats manage to get at it then?'

'Yah! yah! yah!' said Sampson, but, suppressing suddenly his cachinations, he added, 'look heah, massa, I was just a goin' to say as how you was green. Now, does you tink as how dem ere rats wot you sees 'bout de store, and wot's so much in de cabaret at de corner—does you tink, I axes, dat seein' so many takin' julips on de suction princerple, dat dey does'nt know de use of a *straw?* Wal, I reckon dey does, massa.'

'Well, then, Sampson,' said Mr. C., if the sample bottle can neither be preserved from the rats or evaporation, I must only submit to the loss, and fill it whenever it is empty. Fill it now, and leave it again on the shelf, and I care not whether you cork it or not.'

Mr. C. told an acquaintance of his, an apothecary, of Sampson's partiality for the sample bottle, and asked him if he could not give him some decoction to mix with it, which, while it would not visibly alter its color or taste, would prove less agreeable to Sampson's system than the pure Monongahela. The apothecary told him he could; and, on the Tuesday before last, he furnished the required preparation. Sampson was sent out on an errand in the early part of the day, and in his absence the obnoxious ingredients were introduced into whiskey. To give Sampson a better scope, when he returned, his master went out and stayed away long enough to give the sample-tasting Sampson full play at the bottle. When he returned, he noticed a strange and peculiar roiling of Sampson's eyes; his lips were the color of stale venison, and he had all the singular characteristics in his appearance of a "sick nigger." Mr. C. managed to keep him pretty busy, and although appearing not to notice him, closely, watched his movements.

'Wo!' he'd shout, raising his leg up against his stomach, but still endeavoring to conceil his pain from his master, and again he would exclaim, 'ah! e-eeh! wo-o! goramighty!' and he would brace his belly round with his hands and arms. At length, finding himself growing worse—that there was no chance of the pain abating, he threw himself on the floor and roared out, 'O, massa, massa, dis chlid's a gone nigger—oh! a-h! o-o-h!'

'Why, what's the matter Sampson?' said Mr. Cr., appearing to be suddenly astonished at the state of Sampson's bowels.

'Oh! massa, massa,' said Sampson, 'oh! ee! ah! o-o-ah! massa, I'se a gone chicken, ah! ee!' and he wrinkled about on the floor like a pea on a hot gridle, his eyes revolving like the beacon of a light house, and his color changing like a dying dolphin.

'Why, what's the matter with you?' said his master.

'O, I deesn't know, massa,' said Sampson, 'but I guess I'se got the Tyler grippe, and de inSuenzar, and de black womit, and all the oder 'plaints in general, and 'tick'lar on the high pressure, roarin' riber princerple—oh! ah!'

The master offered Sampson a drink out of the same bottle to cure him, but he turned from it as if it were poison of the deadliest quality.

'O, I see how it is,' said Mr. C., 'he has been drinking the whiskey that I had impregnated with poison to kill the rats.'

Sampson, in lugubrious tones, confessed that he had. A dose of castor oil was administered to him, and in a short time he was 'as good as new.'

Since then, neither the rats nor evaporation interfere with the sample bottle; and Sampson is as strict a teetotaler as if he had taken the pledge from father Mathew.

A Notion on Newspapers.

A thousand times we have heard this question and answer:—Two gentlemen meet. 'What's the news?' asks one. 'Nothing but what you see in the papers.' They pass on about their business. Has it ever been noticed, that among the thousand benefits of daily papers not the least is, that it does away at one sweep with the tittle tattle, gossip, street yarn, foolish exaggerations, scandal and news mongering, which once took up so much of the time of those who were always hearing and telling some new thing? One real evil of social life is thus ended. The man rises in the morning, looks over the paper, and is satisfied that he knows all that is worth the knowing of the passing histor of the world. He has nothing to tell and nothing to hear further. He does not spend his time in giving information which his neighbor knows as well as himself—he is not annoyed in the midst of his business or pleasure, by the resital of affairs in which he takes no interest. The same with women. Curiosity is gratified without loss of time. The scandal of the day has not employed a hundred busy, meddling tongues in its circulation and exaggeration. Conversation takes a higher tone. Principles of morals and taste are discussed. The new poem, the last book, the magazine, or the review becomes the subject of conversation. Even in the minor matters of life, society owes a large debt of gratitude to the news papers.—*N. Y. Sun.*

Getting Blue.

"I'm a Washingtonian dyed in the wool," said a reformed drunkard at a temperance meeting in one of the towns of Massachusetts. Waking up at a late hour one night, after a severe carouse, he found himself suffering from intolerable thirst; and recollecting that his mother kept a pot of beer standing by the kitchen fire, he groped his way to the spot in the dark, and took a good hearty swig from a dish he found there. "Mother!" cried he at the top of his voice, his throat smarting with the taste, "what makes your beer so salt?" "Go to bed, my son," answered the old lady, "you are so drunk that you don't know the difference between salt and sweet!" That may be true, thought our hero, and so he turned in again. In the morning he found he had drank out of the blue dye-tub instead of the beer pot, and his face, shirt, &c., were handsomely colored. He had literally got blue. "Therefore," said he, "Mr. President, I am a Washingtonian died in the wool," and nobody doubted it.—*The Fountain.*

The New York Tribune compares the mind of Henry Clay to the trunk of an elephant. It is like it in one particular at least—it has spouted a great deal of muddy water.—*Coos Dem.*

Plutarch says the Babylonians used during the dog-days, to sleep on skins filled with water. In these days men sleep with their skins filled with alcohol.